

SAU 1635

Please type a plus sign (+) inside this box → ☐

PTO/SB/21 (6-98)
Approved for use through 09/30/2000. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a
OMB control number.

| | | | |
|---|----------------------|------------------------|------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 09/412,947 | |
| | Filing Date | 10/5/1999 | |
| | First Named Inventor | Agrawal | |
| | Group Art Unit | 1635 | |
| | Examiner Name | Epps, J. | |
| Total Number of Pages in This Submission | 7 | Attorney Docket Number | HYZ-050CP2 |

RECEIVED
MAY 17 2001
TECH CENTER 1600/2900

| ENCLOSURES (check all that apply) | | |
|--|---|--|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Assignment Papers (for an Application) | <input type="checkbox"/> After Allowance Communication to Group |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment / Response | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input type="checkbox"/> Additional Enclosure(s) (please identify below) |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | <input checked="" type="checkbox"/> Postcard |
| <input checked="" type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Small Entity Statement | PTO Form 1449 References (14) |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application | Remarks | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|--|
| Firm or Individual name | Ann-Louise Kerner, Ph.D. Registration No. 33,523 |
| Signature | <i>Ann-Louise Kerner</i> |
| Date | May 11, 2001 |

| CERTIFICATE OF MAILING | |
|--|----------------------|
| I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: 5/11/2001 | |
| Typed or printed name | Becky Johnson |
| Signature | <i>Becky Johnson</i> |
| Date | 5/11/2001 |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#14
BP
5-19-01

RECEIVED

MAY 17 2001

TECH CENTER 1600/2900

APPLICANT: Agrawal
SERIAL NO.: 09/412,947
DOCKET NO.: HYZ-050CP2
FILING DATE: October 5, 1999

GROUP: 1635
EXAMINER: Epps, J.

TITLE
MODIFIED PROTEIN KINASE A-SPECIFIC
OLIGONUCLEOTIDES AND METHODS OF THEIR USE

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231 on the date indicated below.

Date:

5/11/01

By:

Betsy Johnson

Commissioner for Patents
Washington, D.C. 20231

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicant and his legal representatives are aware of the following publications and information listed on the attached Form PTO-1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration.

The best available copy of all the references listed on Form PTO-1449 are enclosed, except for the following:

1. U.S. Patent No. 5,220,007 to Pederson et al. (6/5/1993)
2. EP 0 490 077 A1 (10/31/1991)
3. Folkman, Judah, "Tumor Angiogenesis." In: J. Mendelsohn *et al.*, eds., *The Molecular Basis of Cancer*, pp. 206-232, Philadelphia: WB Saunders (1995)

4. Goodchild, John, "Bioconjugate Chemistry" *Bioconjugate Chem.*, Vol. 1, pp. 165-187 (1990)
5. Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle." *Chem. Rev.*, Vol. 90, pp. 544-584 (1990)
6. Zhang et al., "In Vivo Stability, Disposition and Metabolism of a "Hybrid" Oligonucleotide Phosphorothioate in Rats" *Biochemical Pharmacology*, Vol. 50, pp. 545-556 (1995)

Accurate copies of these references were submitted with the Information Disclosure Statement filed on March 26, 2001; however, there were errors in the citations to these references on the Form PTO-1449 that are corrected on the Form PTO-1449 submitted herewith.

Copies of the following references which were cited in the Information Disclosure Statement filed on March 26, 2001, but were then unavailable, are enclosed herewith.

1. Beaucage, Serge L., "Oligodeoxyribonucleotides Synthesis." in Protocols for Oligonucleotides and Analogs, Agrawal (ed.), Humana Press, Totowa, N.J., *Meth. Mol. Biol.*, Vol. 20, pp. 33-61 (1993)
2. Cadd et al., "Holoenzymes of cAMP-dependent protein kinase containing the neural form of type I regulatory subunit have an increased sensitivity to cyclic nucleotides." *J. Biol. Chem.*, Vol. 265, pp. 19502-19506 (1990)
3. Cheng et al., "An active twenty-amino-acid-residue peptide derived from the inhibitor protein of the cyclic AMP-dependent protein kinase." *Biochem J.*, Vol. 231, No. 3, pp. 655-661 (1985)
4. Cho-Chung, YS, "Hypothesis. Cyclic AMP and its receptor protein in tumor growth regulation in vivo." *J. Cyclic Nucleotide Res.*, Vol. 6, pp. 163-167 (1980)
5. Cho-Chung, YS, "Role of cyclic AMP receptor proteins in growth, differentiation, and suppression of malignancy: new approaches to therapy." *Cancer Res.*, Vol. 50, pp. 7093-7100 (1990)
6. Cho-Chung et al., *Curr. Opin. Thera. Patents*, Vol. 3, pp. 1737-1750 (1993)
7. Henry et al. *Pharm. Res.* 11: PPD8082 (1994)
8. Iversen, Antisense Research and Application (Crooke, ed) CRC Press, pp. 461-469 (1993)
9. Kabat and Mayer (eds), *Experimental Immunochemistry*, 2d Ed., Springfield, IL, CC Thomas, p. 125

10. Mantel, "Evaluation of survival data and two new rank order statistics arising in its consideration." *Cancer Chemother. Rep.*, Vol. 50, No. 3, pp. 163-170 (1966)
11. Rohlf et al., "8-Cl-cAMP induces truncation and down-regulation of the RI alpha subunit and up-regulation of the RII beta subunit of cAMP-dependent protein kinase leading to type II holoenzyme-dependent growth inhibition and differentiation of HL-60 leukemia cells." *J. Biol. Chem.*, Vol. 268, pp. 5774-5782 (1993)
12. Slapak et al. in Harrison's Principles of Internal Medicine (Isselbacher et al., eds.) McGraw-Hill, Inc., NY, pp. 1826-1850 (1994)
13. Uhler et al. "Expression of cDNAs for two isoforms of the catalytic subunit of cAMP-dependent protein kinase." *J. Biol. Chem.*, Vol. 262, pp. 15202-15207 (1987)

The references by Beaucage, Iverson, Mantel, Kabat and Mayer, and Cho-Chung (1980) are also cited to correct errors in their citation in the previous Information Disclosure Statement.

Applicant believes that the reference by Clair et al. was submitted with the previous Information Disclosure Statement at the back of the reference by Clegg et al. but was not listed on the previous Form PTO-1449. Accordingly it is herein listed on the attached Form PTO-1449, and a separate copy is provided as well.

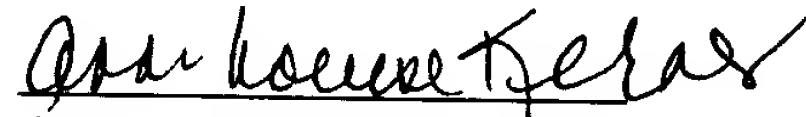
This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicant understands that the Examiner will make an independent evaluation of the cited publications.

This Information Disclosure Statement is being filed after the mailing date of a first Office Action from the Patent and Trademark Office for the above-referenced application on the merits; however, this Information Disclosure Statement is merely correcting errors in the Information Disclosure Statement filed on March 26, 2001. Therefore, no fee is believed to be due. However, please charge any underpayments or credit any overpayments to our Deposit Account No. 08-0219.

If there are any questions, please contact the undersigned at the telephone number indicated below.

Respectfully submitted,

HALE AND DORR LLP



Ann-Louise Kerner, Ph.D.

Registration No. 33,523

Attorney for Applicant

May 11, 2001
60 State Street
Boston, MA 02109
(617) 526-6000
(617) 526-5000 (fax)